

# SA-VE702/VE705/ WMS7/SS-MS7

## SERVICE MANUAL

Ver 1.1 2002. 10

*US Model  
Canadian Model  
SA-VE705/WMS7/SS-MS7*

*AEP Model  
UK Model  
E Model*



Photo : SA-WMS7



Photo : SS-MS7

The SA-VE702 system consists of one unit of SA-WMS5 and two units of SS-MS7.  
The SA-VE705 system consists of one unit of SA-WMS7 and five units of SS-MS7.

### SPECIFICATIONS

#### AUDIO POWER SPECIFICATIONS:

##### US model

#### POWER OUTPUT AND TOTAL

#### HARMONIC DISTORTION :

with 8  $\Omega$  loads, both channels driven, from 20 - 150Hz; rates  
120 W per channel minimum RMS power, with no more  
than 0.8% total harmonic distortion from 250 mW to rated  
output.

#### SS-MS7 (front, center, and rear speakers)

Speaker system	2 way, magnetically shielded
Speaker units	
Tweeter :	1.9 cm ( $3/4$ in.), dome type
Woofer :	5 cm (2 in.) $\times$ 2, balanced drive type
Enclosure type	Bass reflex
Rated impedance	8 $\Omega$
Power handling capacity	
Maximum input power:	140 W
Sensitivity level	87 dB (1W, 1m)
Frequency range	120 Hz - 40,000 Hz
Dimensions (w/h/d)	

When attached speaker grilles:

Approx. 86  $\times$  169  $\times$  130 mm  
( $3\frac{1}{2}$   $\times$  6 $\frac{3}{4}$   $\times$  5 $\frac{1}{8}$  in.) each

When attached to supplied speaker stand:

Approx. 96  $\times$  207  $\times$  141 mm  
(3 $\frac{7}{8}$   $\times$  8 $\frac{1}{4}$   $\times$  5 $\frac{5}{8}$  in.) each  
(Front (and rear) speakers)  
Approx. 169  $\times$  131  $\times$  144 mm  
(6 $\frac{3}{4}$   $\times$  5 $\frac{1}{4}$   $\times$  5 $\frac{3}{4}$  in.),  
(Center speaker: pointed upwards)  
Approx. 169  $\times$  118  $\times$  141 mm  
(6 $\frac{3}{4}$   $\times$  4 $\frac{3}{4}$   $\times$  5 $\frac{5}{8}$  in.),  
(Center speaker: pointed  
downwards):

#### Mass

When attached speaker grilles:

Approx. 1.3 kg (2lb 14oz) each

When attached to supplied speaker stand:

Approx. 1.4 kg (3lb 1oz) each,  
(Front (and rear) speakers)

Approx. 1.4 kg (3lb 1oz)(Center  
speaker)

#### SS-WMS7 (subwoofer)

##### System

Speaker system	Active subwoofer, magnetically shielded
Speaker unit	Woofer : 20 cm (8 in.), cone type
Enclosure type	Advanced SAW type
Practical maximum output	120 W
Reproduction frequency range	24 Hz - 150 Hz

##### Inputs

LINE IN (input pin jack)

SPEAKER IN (input terminals)

##### Outputs

LINE OUT (output pin jack)

SPEAKER OUT (output terminals)

##### General

Power requirements	
USA and Canada :	120 V AC, 60 Hz
Europe :	220 - 230 V AC, 50/60 Hz
Others :	220 - 240 V AC, 50/60 Hz
Power consumptions	80 W
Dimensions (w/h/d)	Approx. 230 $\times$ 380 $\times$ 470 mm (9 $\frac{1}{8}$ $\times$ 15 $\times$ 18 $\frac{5}{8}$ in.), including front grille
Mass	Approx. 17 kg (37 lb 8oz)

#### Supplied accessories

##### SA-VE705

Speaker stands (for the front and rear speakers) (4)  
Speaker stand (for the center speaker) (1)  
Screws (for the speaker stands) (10)  
Washers (for the speaker stands) (10)  
Brackets (for the front and rear speaker stands) (4)  
Speaker grilles (5)  
Audio connecting cord (1)  
Speaker connecting cords, 2.5 m(8 ft $\frac{1}{2}$  in.) (5)  
Speaker connecting cords, 10 m(32 ft $\frac{3}{4}$  in.) (2)

##### SA-VE702

Speaker stands (for the front speakers) (2)  
Screws (for the speaker stands) (4)  
Washers (for the speaker stands) (4)  
Brackets (for the front speaker stands) (2)  
Speaker grilles (2)  
Audio connecting cord (1)  
Speaker connecting cords, 2.5 m(8 ft $\frac{1}{2}$  in.) (4)

Design and specifications are subject to change without notice

## MICRO SATELLITE SYSTEM

9-928-978-12  
2002J1600-1  
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**Sony Corporation**  
Home Audio Company  
Published by Sony Engineering Corporation

# SONY®

## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

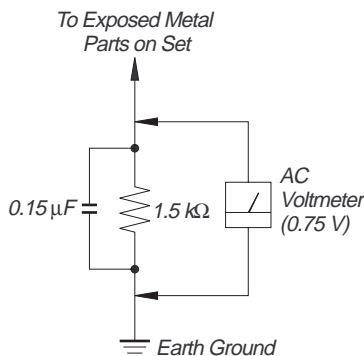


Fig. A. Using an AC voltmeter to check AC leakage.

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

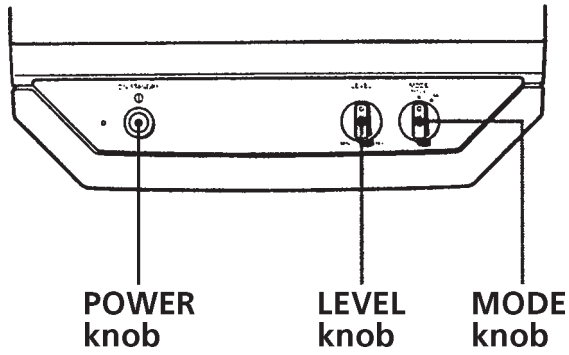
### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  $\triangle$  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

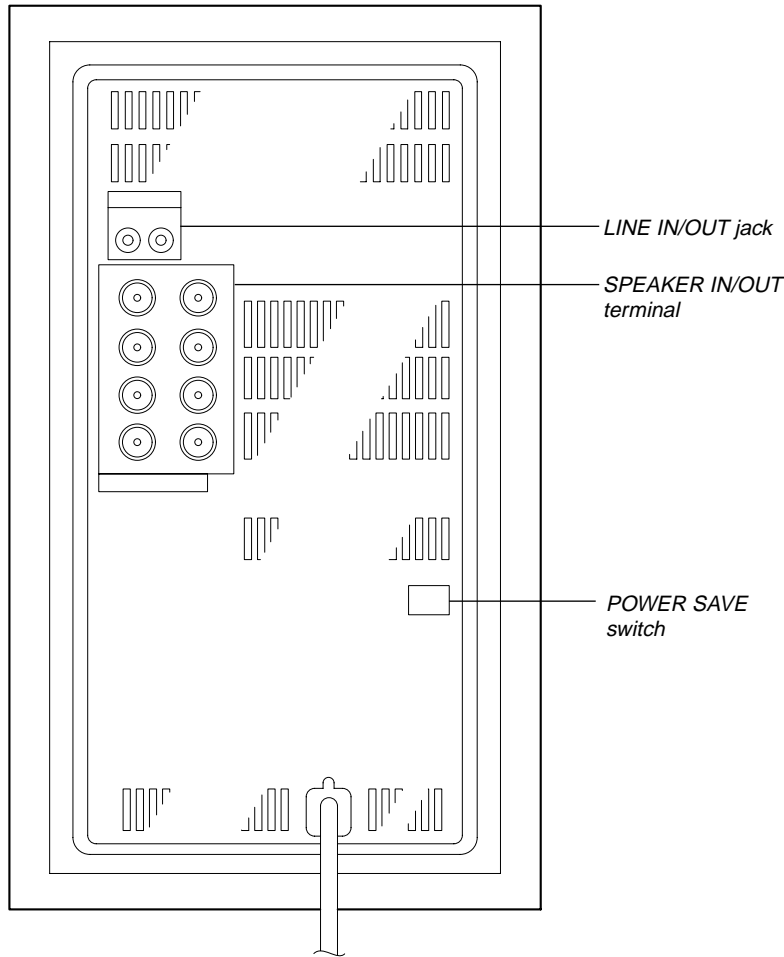
SECTION 1  
GENERAL

• Location of Controls

SA-WMS7  
– Front view –



– Rear view –

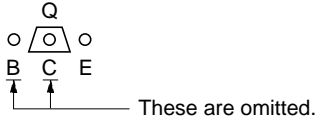


SECTION 2  
DIAGRAMS

2-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- : parts extracted from the component side.
- ▨ : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)
- Indication of transistor.



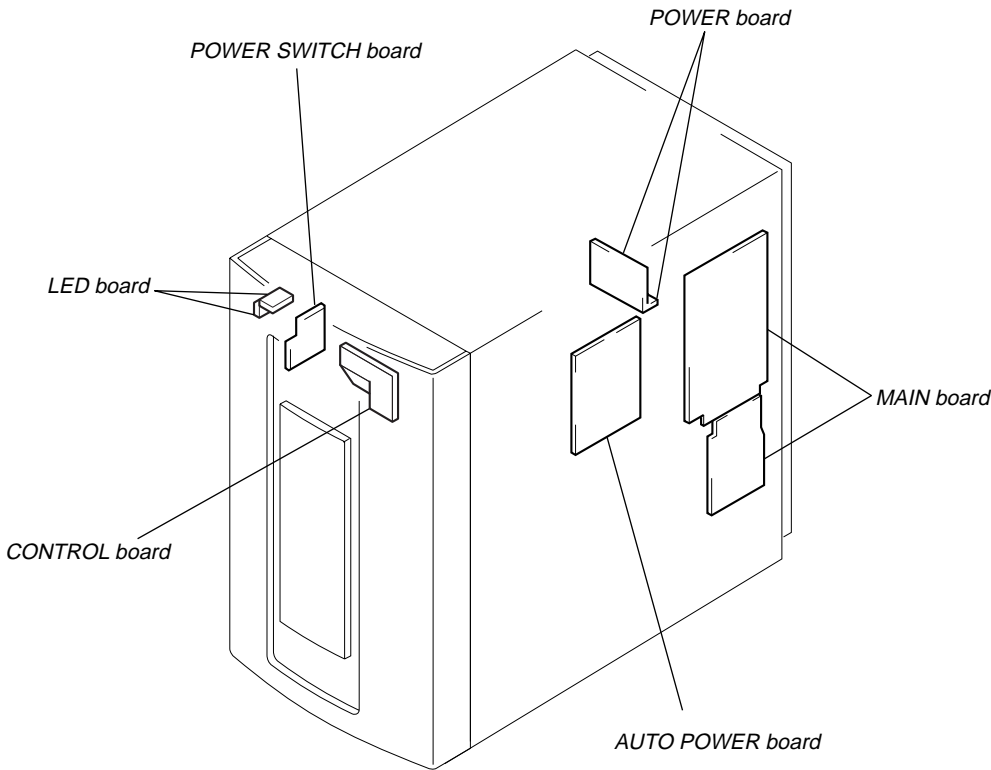
Note on Schematic Diagram:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
- ▨ : nonflammable resistor.
- ▭ : panel designation.

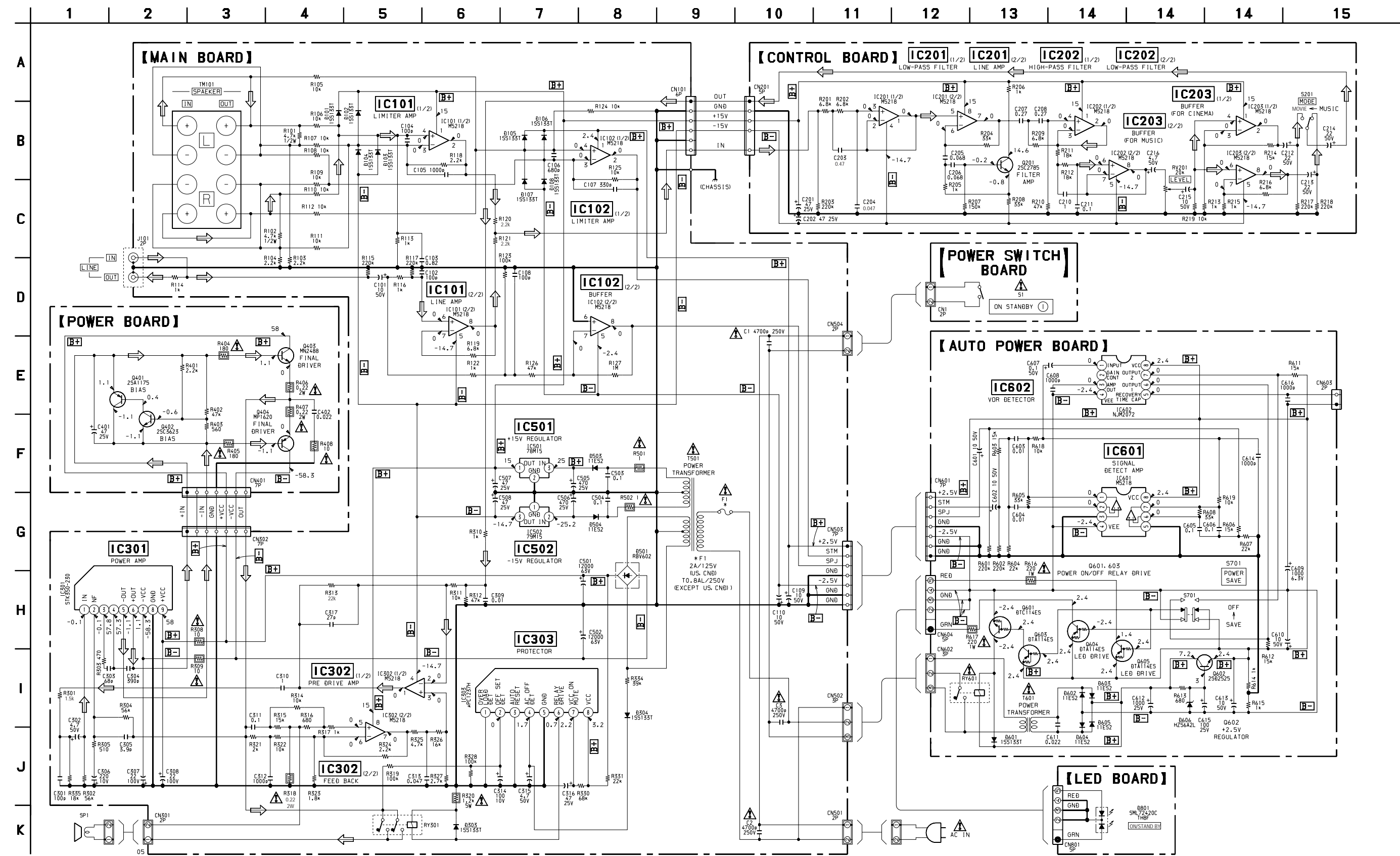
<b>Note:</b> The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.	<b>Note:</b> Les composants identifiés par une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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- $\boxed{B+}$  : B+ Line.
- $\boxed{B-}$  : B- Line.
- Voltages are dc with respect to ground under no-signal conditions.  
no mark : AUDIO
- Voltages are taken with a VOM (input impedance  $10\text{M}\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Signal path.  
 $\Rightarrow$  : AUDIO
- Abbreviation  
CND : Canadian

• Circuit Boards Location  
SA-WMS7



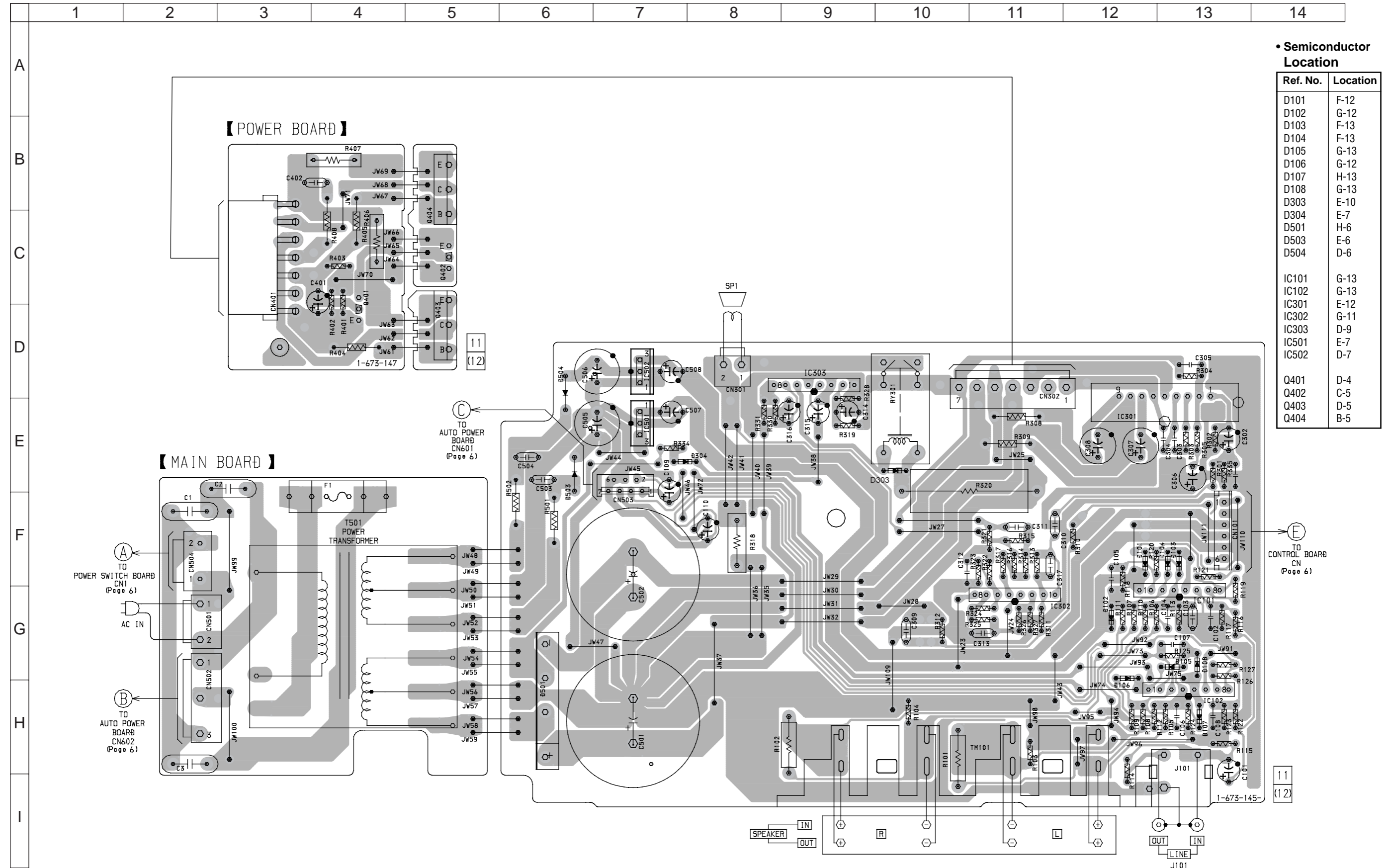
2-2. SCHEMATIC DIAGRAM • See page 7 for IC Block Diagrams.



The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

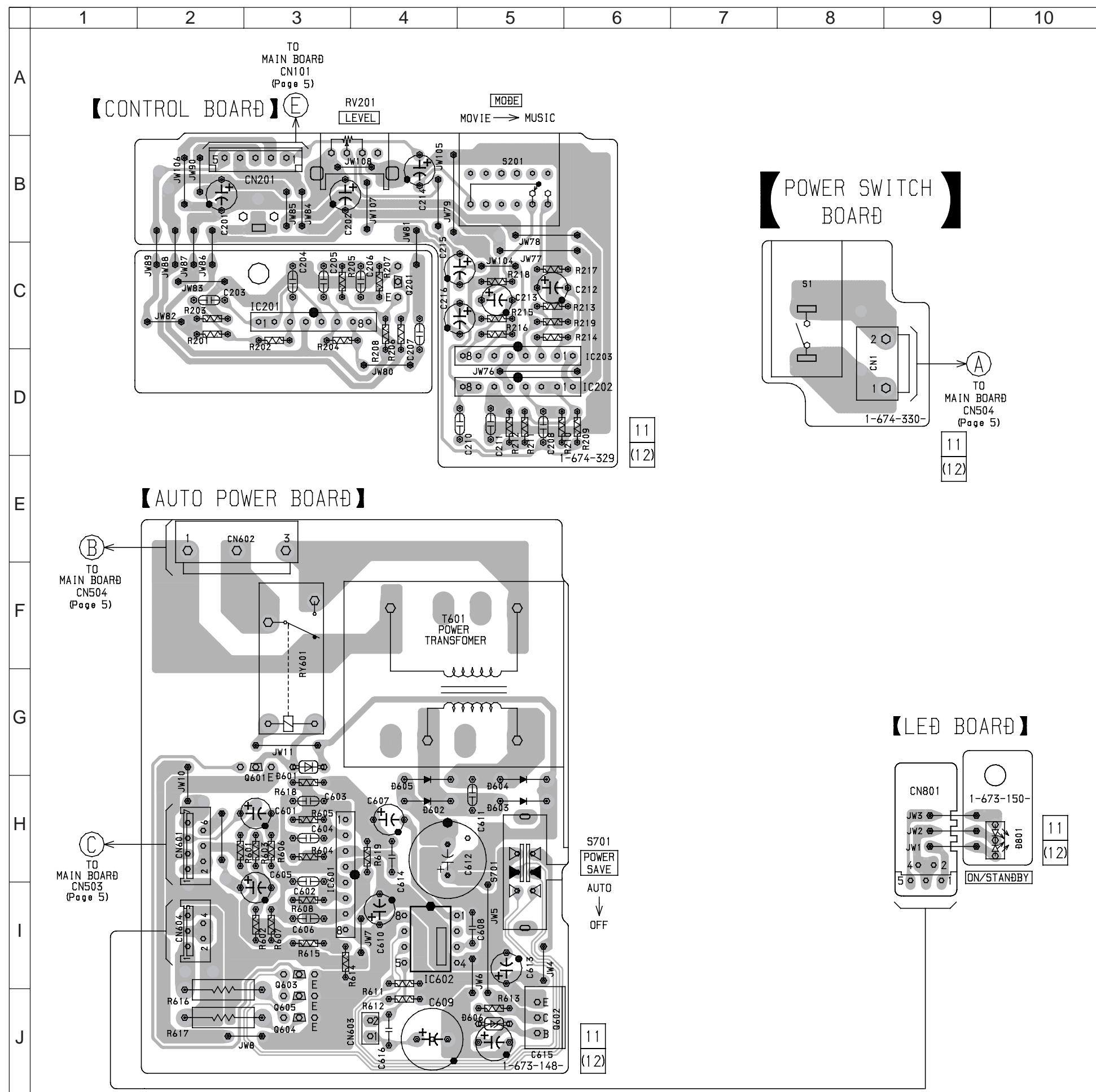
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**2-3. PRINTED WIRING BOARD MAIN SECTION** • See page 3 for Circuit Boards Location.



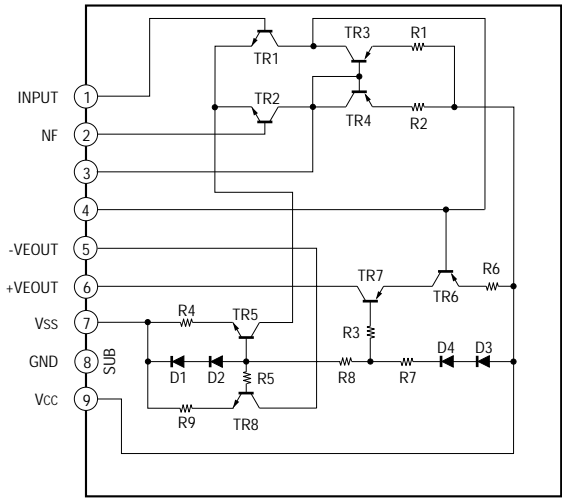
## 2-4. PRINTED WIRING BOARD CONTROL SECTION

- See page 3 for Circuit Boards Location.
- See page 4 for Schematic Diagram.

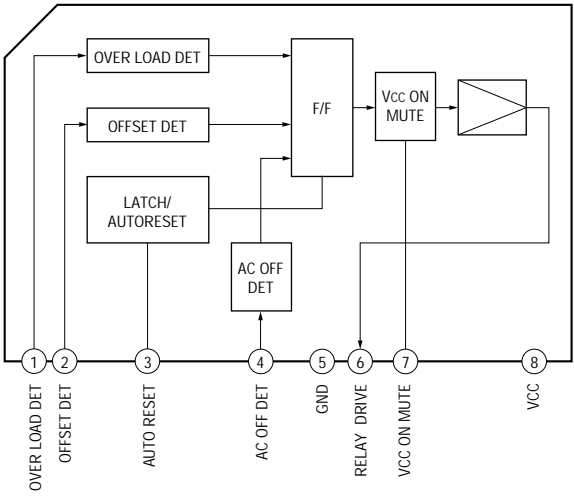


• IC Block Diagrams

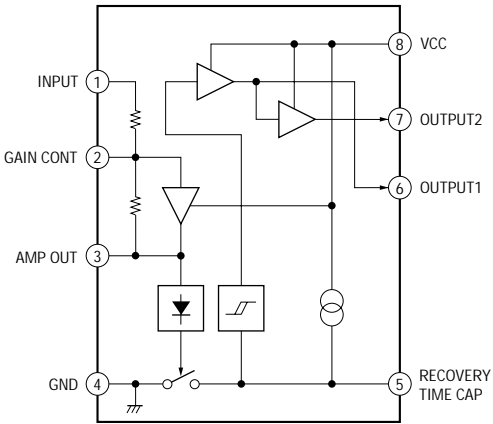
IC301 STK350-230 (MAIN Board)



IC303  $\mu$ PC1237HA (MAIN Board)



IC602 NJM2072D (AUTO POWER Board)



SECTION 3  
EXPLODED VIEWS

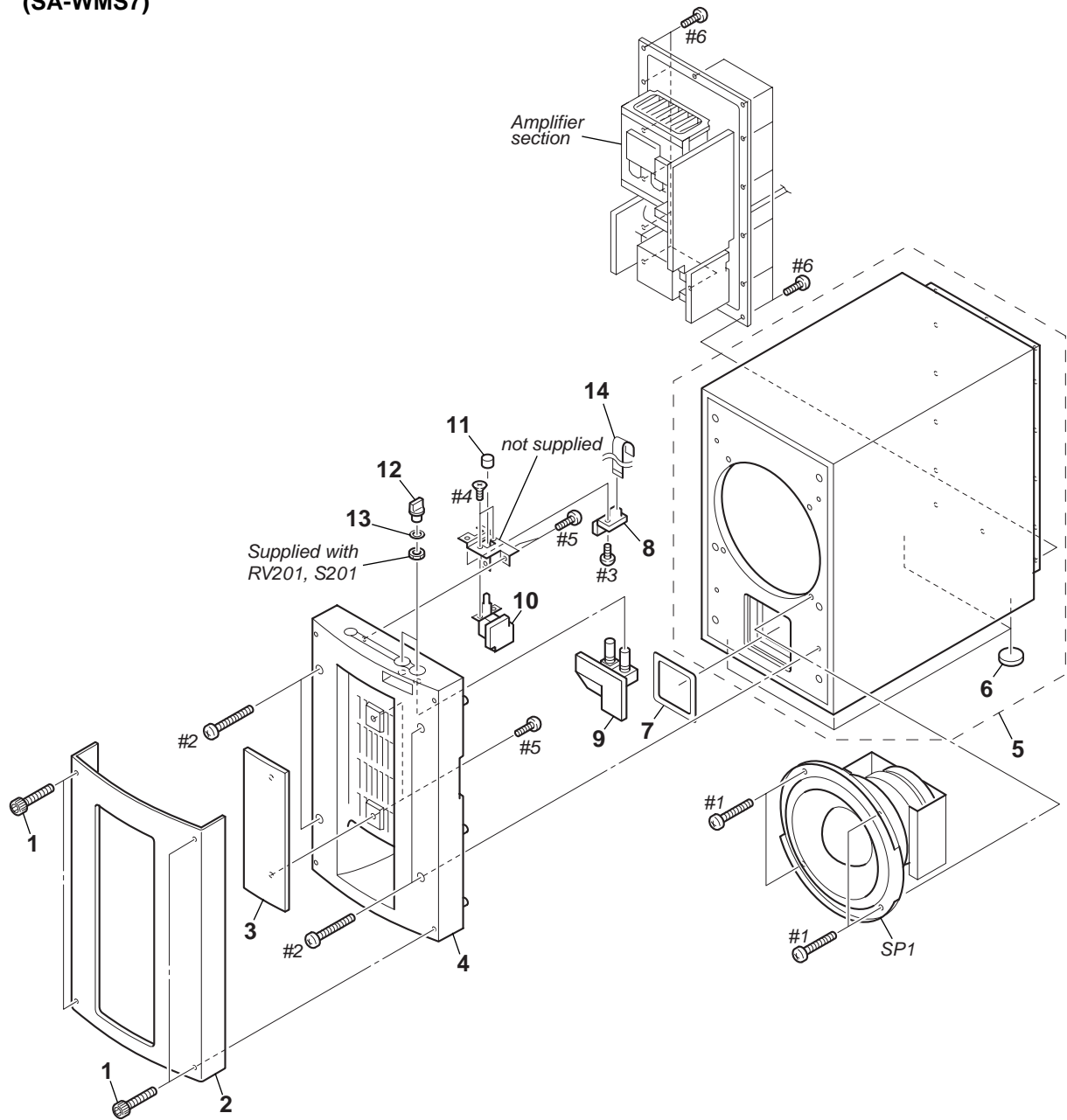
- NOTE:
- XX, -X mean standardized parts, so they may have some differences from the original one.
  - Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
  - The mechanical parts with no reference number in the exploded views are not supplied.

- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation  
CND : Canadian model  
G : German model  
MY : Malaysia model  
SP : Singapore model

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

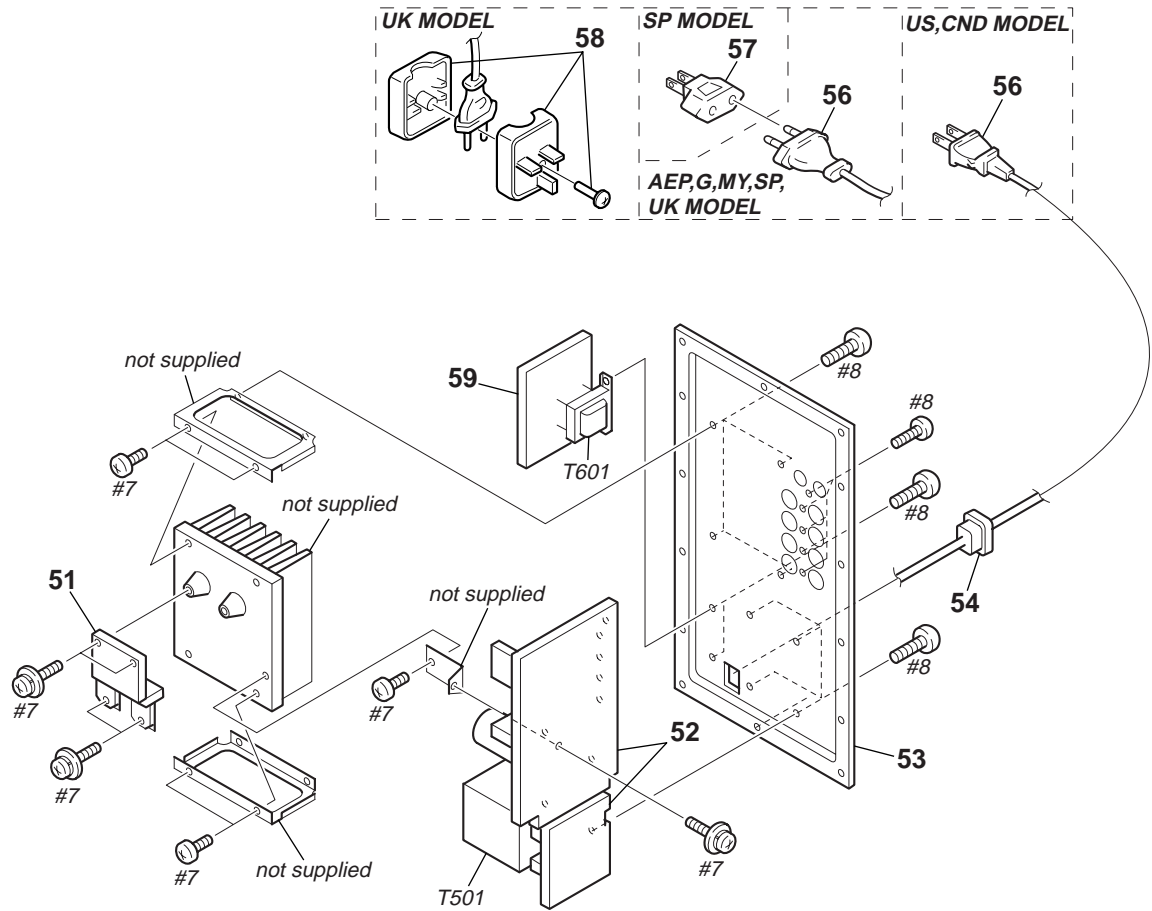
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

(1) FRONT PANEL SECTION  
(SA-WMS7)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-222-422-01	SCREW (4 × 16)		9	1-674-329-11	CONTROL BOARD	
2	4-220-858-01	PANEL(A), ORNAMENTAL		10	1-674-330-11	POWER SWITCH BOARD	
3	4-220-859-01	PANEL(B), ORNAMENTAL		11	4-973-938-31	KNOB(A), PUSH	
4	X-4951-887-1	PANEL ASSY, FRONT		12	4-999-482-11	KNOB(VOL)	
5	A-4411-710-A	CABINET ASSY, SPEAKER		13	4-217-642-01	SHEET	
6	4-981-864-01	FOOT		14	1-824-346-11	WIRE,FLAT TYPE 5P	
7	4-222-467-01	PACKING		SP1	1-529-513-11	SPEAKER	
8	1-673-150-11	LED BOARD					

(2) AMPLIFIER SECTION  
(SA-WMS7)

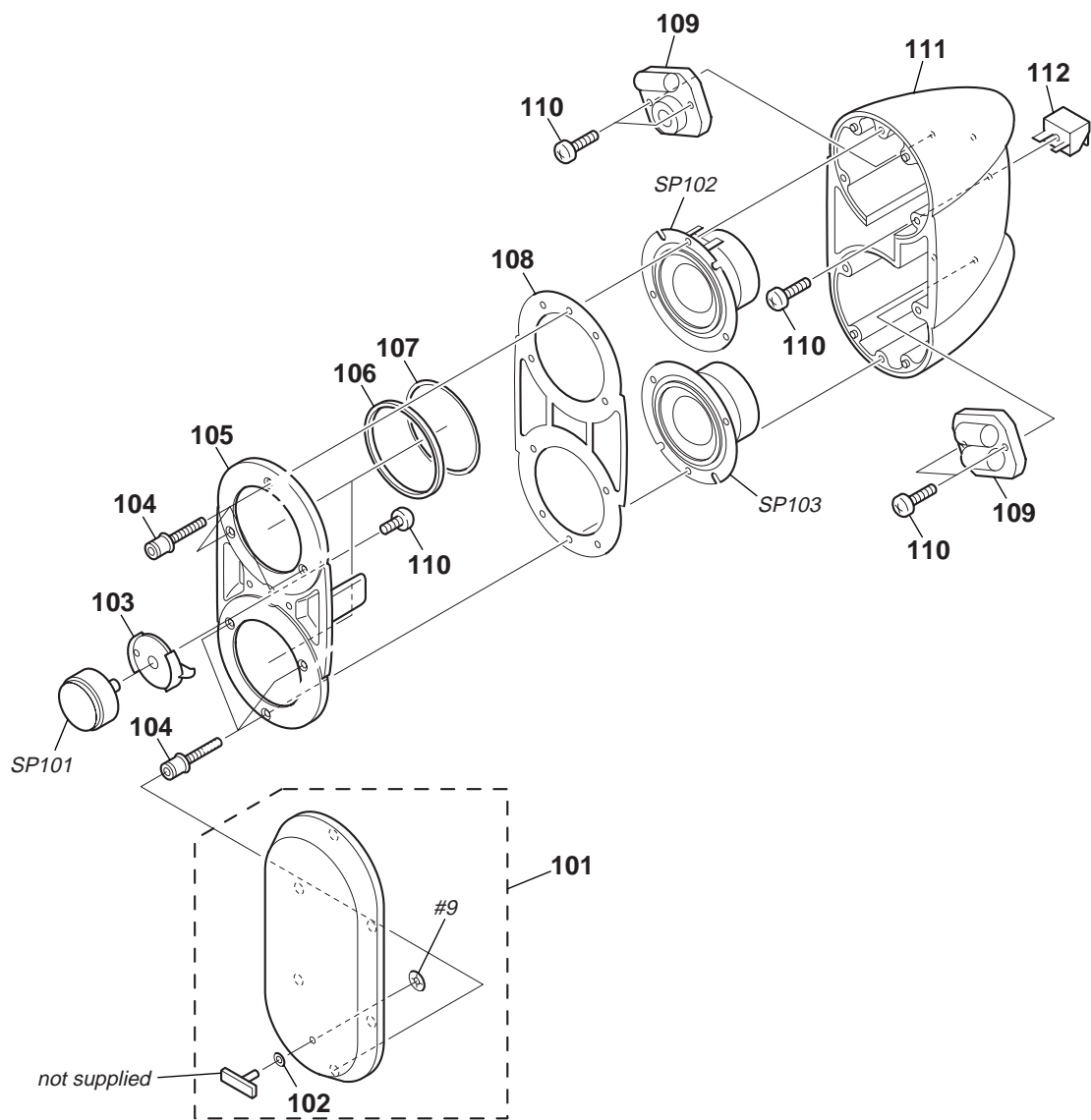


Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	1-673-147-11	POWER BOARD		△ 57	1-569-008-21	ADAPTOR, CONVERSION 2P (SP)	
52	A-4426-644-A	MAIN BOARD, COMPLETE		△ 58	1-770-019-21	ADAPTOR, CONVERSION PLUG 3P (UK)	
53	4-222-939-11	PANEL, REAR (US,CND)		59	A-4419-290-A	AUTO POWER BOARD, COMPLETE	
53	4-222-939-21	PANEL, REAR (AEP,G,UK,MY,SP)		△ T501	1-433-726-11	TRANSFORMER, POWER (US,CND)	
* 54	3-703-244-00	BUSHING (2104), CORD		△ T501	1-433-728-12	TRANSFORMER, POWER (AEP,G,UK,MY,SP)	
55	3-710-901-11	SCREW, TAPPING		△ T601	1-433-731-11	TRANSFORMER, POWER (US,CND)	
△ 56	1-769-744-11	CORD, POWER (AEP,G,UK,MY,SP)		△ T601	1-433-732-11	TRANSFORMER, POWER (AEP,G,UK,MY,SP)	
△ 56	1-783-531-11	CORD, POWER (US,CND)					

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

(3) SS-MS7



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-4951-883-1	FRAME ASSY, GRILLE		109	1-761-265-11	MOUNTED PC BOARD (NETWORK)	
102	3-701-436-21	WASHER POLYETHYLENE		110	4-986-971-11	SCREW (3.5)	
103	4-220-786-01	BASE, TW		111	4-220-780-01	CABINET	
104	4-220-784-01	SCREW, ORNAMENTAL		112	1-694-516-11	TERMINAL, SPEAKER	
105	4-220-779-01	PANEL, FRONT		SP101	1-529-291-11	SPEAKER (2.5cm)	
106	4-220-781-01	RING		SP102	1-529-290-11	SPEAKER (5cm)	
107	4-222-663-01	PACKING		SP103	1-529-290-11	SPEAKER (5cm)	
108	4-220-785-01	PACKING					

## SECTION 4 ELECTRICAL PARTS LIST

**AUTO POWER**

**CONTROL**

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation  
CND : Canadian model  
SP : Singapore model  
G : German model  
MY : Malaysia model

- CAPACITORS:  
uF:  $\mu$ F
- RESISTORS  
All resistors are in ohms.  
METAL: metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F: nonflammable
- COILS  
uH:  $\mu$ H

- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...,  $\mu$ A..., uPA...,  $\mu$ PA...,  
uPB...,  $\mu$ PB..., uPC...,  $\mu$ PC...,  
uPD...,  $\mu$ PD...

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
	A-4419-290-A	AUTO POWER BOARD, COMPLETE *****				< TRANSISTOR >	
		< CAPACITOR >		Q601	8-729-029-66	TRANSISTOR DTC114ES	
C601	1-126-964-11	ELECT 10uF 20% 50V		Q602	8-729-026-68	TRANSISTOR 2SD2525	
C602	1-126-964-11	ELECT 10uF 20% 50V		Q603	8-729-422-57	TRANSISTOR DTA114ES	
C603	1-162-306-11	CERAMIC 0.01uF 20% 16V		Q604	8-729-422-57	TRANSISTOR DTA114ES	
C604	1-162-306-11	CERAMIC 0.01uF 20% 16V		Q605	8-729-422-57	TRANSISTOR DTA114ES	
C605	1-164-159-11	CERAMIC 0.1uF 50V				< RESISTOR >	
C606	1-164-159-11	CERAMIC 0.1uF 50V		R601	1-247-887-00	CARBON 220K 5% 1/4W	
C607	1-126-956-91	ELECT 0.1uF 20% 50V		R602	1-247-887-00	CARBON 220K 5% 1/4W	
C608	1-162-294-31	CERAMIC 0.001uF 10% 50V		R603	1-249-431-11	CARBON 15K 5% 1/4W	
C609	1-126-916-11	ELECT 1000uF 20% 6.3V		R604	1-249-433-11	CARBON 22K 5% 1/4W	
C610	1-126-964-11	ELECT 10uF 20% 50V		R605	1-249-435-11	CARBON 33K 5% 1/4W	
C611	1-161-494-00	CERAMIC 0.022uF 25V		R606	1-249-431-11	CARBON 15K 5% 1/4W	
C612	1-126-942-61	ELECT 1000uF 20% 25V		R607	1-249-433-11	CARBON 22K 5% 1/4W	
C613	1-126-964-11	ELECT 10uF 20% 50V		R608	1-249-435-11	CARBON 33K 5% 1/4W	
C614	1-162-294-31	CERAMIC 0.001uF 10% 50V		R611	1-249-431-11	CARBON 15K 5% 1/4W	
C615	1-104-665-11	ELECT 100uF 20% 25V		R612	1-249-431-11	CARBON 15K 5% 1/4W	
C616	1-162-294-31	CERAMIC 0.001uF 10% 50V		R613	1-249-415-11	CARBON 680 5% 1/4W F	
		< CONNECTOR >		R614	1-249-417-11	CARBON 1K 5% 1/4W F	
CN601	1-568-439-11	SOCKET, CONNECTOR 7P		R615	1-249-417-11	CARBON 1K 5% 1/4W F	
* CN602	1-564-687-11	PIN, CONNECTOR 3P		$\Delta$ R616	1-215-865-81	METAL OXIDE 220 5% 1W	
* CN603	1-565-513-11	PIN, CONNECTOR 2P		$\Delta$ R617	1-215-865-81	METAL OXIDE 220 5% 1W	
CN604	1-569-315-11	SOCKET, CONNECTOR 5P		R618	1-249-429-11	CARBON 10K 5% 1/4W	
* CN605	1-565-514-11	SOCKET, CONNECTOR 2P		R619	1-249-429-11	CARBON 10K 5% 1/4W	
		< DIODE >				< RELAY >	
D601	8-719-991-33	DIODE 1SS133T-77		RY601	1-755-276-11	RELAY, POWER	
D602	8-719-200-82	DIODE 11ES2				< SWITCH >	
D603	8-719-200-82	DIODE 11ES2		S701	1-570-707-31	SWITCH, SLIDE (POWER SAVE)	
D604	8-719-200-82	DIODE 11ES2		*****			
D605	8-719-200-82	DIODE 11ES2					
D606	8-719-985-85	DIODE HZS6A2L			1-674-329-11	CONTROL BOARD	
		< IC >				*****	
IC601	8-759-634-50	IC M5218AL				< CAPACITOR >	
IC602	8-759-701-55	IC NJM2072D		C201	1-104-664-11	ELECT 47uF 20% 25V	
				C202	1-104-664-11	ELECT 47uF 20% 25V	
				C203	1-136-173-00	FILM 0.47uF 5% 50V	
				C204	1-136-161-00	FILM 0.047uF 5% 50V	
				C205	1-136-163-00	FILM 0.068uF 5% 50V	

# CONTROL

# LED

# MAIN

Ref. No.	Part No.	Description	Remarks
C206	1-136-163-00	FILM 0.068uF 5%	50V
C207	1-136-170-00	FILM 0.27uF 5%	50V
C208	1-136-170-00	FILM 0.27uF 5%	50V
C210	1-136-177-00	FILM 1uF 5%	50V
C211	1-136-165-00	FILM 0.1uF 5%	50V
C212	1-126-965-11	ELECT 22uF 20%	50V
C213	1-126-965-11	ELECT 22uF 20%	50V
C214	1-126-965-11	ELECT 22uF 20%	50V
C215	1-126-964-11	ELECT 10uF 20%	50V
C216	1-126-963-11	ELECT 4.7uF 20%	50V

< CONNECTOR >

\* CN201 1-564-520-11 PLUG, CONNECTOR 5P

< IC >

IC201 8-759-634-50 IC M5218AL  
 IC202 8-759-634-50 IC M5218AL  
 IC203 8-759-634-50 IC M5218AL

< TRANSISTOR >

Q201 8-729-178-55 TRANSISTOR 2SC2785-E

< RESISTOR >

R201 1-249-427-11 CARBON 6.8K 5% 1/4W F  
 R202 1-249-427-11 CARBON 6.8K 5% 1/4W F  
 R203 1-247-887-00 CARBON 220K 5% 1/4W  
 R204 1-249-435-11 CARBON 33K 5% 1/4W  
 R205 1-249-417-11 CARBON 1K 5% 1/4W F  
 R206 1-249-417-11 CARBON 1K 5% 1/4W F  
 R207 1-247-883-00 CARBON 150K 5% 1/4W  
 R208 1-249-435-11 CARBON 33K 5% 1/4W  
 R209 1-249-427-11 CARBON 6.8K 5% 1/4W F  
 R210 1-249-437-11 CARBON 47K 5% 1/4W  
 R211 1-249-432-11 CARBON 18K 5% 1/4W  
 R212 1-249-432-11 CARBON 18K 5% 1/4W  
 R213 1-249-417-11 CARBON 1K 5% 1/4W F  
 R214 1-249-431-11 CARBON 15K 5% 1/4W  
 R215 1-249-417-11 CARBON 1K 5% 1/4W F  
 R216 1-249-427-11 CARBON 6.8K 5% 1/4W F  
 R217 1-247-887-00 CARBON 220K 5% 1/4W  
 R218 1-247-887-00 CARBON 220K 5% 1/4W  
 R219 1-249-429-11 CARBON 10K 5% 1/4W

< VARIABLE RESISTOR >

RV201 1-225-826-11 RES, VAR, CARBON 20K (LEVEL)

< SWITCH >

S201 1-771-632-11 SWITCH, ROTARY (MODE)

\*\*\*\*\*

Ref. No.	Part No.	Description	Remarks
	1-673-150-11	LED BOARD *****	
		< CONNECTOR >	
CN801	1-569-299-11	SOCKET, CONNECTOR (L TYPE) 5P	
		< LED >	
D801	8-719-061-31	LED SML72420CTH8F (POWER ON/SAVE)	

\*\*\*\*\*

A-4426-644-A MAIN BOARD, COMPLETE  
 \*\*\*\*\*

1-533-233-11 HOLDER, FUSE

< CAPACITOR >

△ C1 1-113-924-11 CERAMIC 0.0047uF 20% 250V  
 △ C2 1-113-924-11 CERAMIC 0.0047uF 20% 250V  
 △ C3 1-113-924-11 CERAMIC 0.0047uF 20% 250V  
 C101 1-126-964-11 ELECT 10uF 20% 50V  
 C102 1-162-282-31 CERAMIC 100PF 10% 50V  
 C103 1-136-176-00 FILM 0.82uF 5% 50V  
 C104 1-162-282-31 CERAMIC 100PF 10% 50V  
 C105 1-162-294-31 CERAMIC 0.001uF 10% 50V  
 C106 1-162-292-31 CERAMIC 680PF 10% 50V  
 C107 1-162-288-31 CERAMIC 330PF 10% 50V  
 C108 1-162-282-31 CERAMIC 100PF 10% 50V  
 C109 1-126-964-11 ELECT 10uF 20% 50V  
 C110 1-126-964-11 ELECT 10uF 20% 50V  
 C301 1-162-282-31 CERAMIC 100PF 10% 50V  
 C302 1-126-963-11 ELECT 4.7uF 20% 50V  
 C303 1-162-219-31 CERAMIC 68PF 5% 50V  
 C304 1-162-289-31 CERAMIC 390PF 10% 50V  
 C305 1-162-194-31 CERAMIC 3.9PF 10% 50V  
 C306 1-126-934-11 ELECT 220uF 20% 10V  
 C307 1-128-560-11 ELECT 22uF 20% 100V  
 C308 1-128-560-11 ELECT 22uF 20% 100V  
 C309 1-130-483-00 MYLAR 0.01uF 5% 50V  
 C310 1-136-177-00 FILM 1uF 5% 50V  
 C311 1-130-495-00 MYLAR 0.1uF 5% 50V  
 C312 1-162-294-31 CERAMIC 0.001uF 10% 50V  
 C313 1-130-491-00 MYLAR 0.047uF 5% 50V  
 C314 1-104-665-11 ELECT 100uF 20% 10V  
 C315 1-126-963-11 ELECT 4.7uF 20% 50V  
 C316 1-104-664-11 ELECT 47uF 20% 25V  
 C501 1-127-891-11 ELECT 12000uF 20% 63V  
 C502 1-127-891-11 ELECT 12000uF 20% 63V  
 C503 1-136-165-00 FILM 0.1uF 5% 50V  
 C504 1-136-165-00 FILM 0.1uF 5% 50V  
 C505 1-126-941-11 ELECT 470uF 20% 25V  
 C506 1-126-941-11 ELECT 470uF 20% 25V  
 C507 1-104-664-11 ELECT 47uF 20% 25V  
 C508 1-104-664-11 ELECT 47uF 20% 25V

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< CONNECTOR >				R116	1-249-417-11	CARBON 1K 5%	1/4W F
* CN101	1-564-521-11	PLUG, CONNECTOR 6P		R117	1-247-887-00	CARBON 220K 5%	1/4W
* CN301	1-565-792-11	PIN, CONNECTOR 2P		R118	1-249-421-11	CARBON 2.2K 5%	1/4W F
* CN302	1-564-242-00	PIN, CONNECTOR 5P		R119	1-249-427-11	CARBON 6.8K 5%	1/4W F
CN501	1-564-321-00	PIN, CONNECTOR 2P		R120	1-249-421-11	CARBON 2.2K 5%	1/4W F
* CN502	1-564-687-11	PIN, CONNECTOR 3P		R121	1-249-421-11	CARBON 2.2K 5%	1/4W F
CN503	1-568-439-11	SOCKET, CONNECTOR 7P		R122	1-249-417-11	CARBON 1K 5%	1/4W F
* CN504	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P		R123	1-249-441-11	CARBON 100K 5%	1/4W
< DIODE >				R124	1-249-429-11	CARBON 10K 5%	1/4W
D101	8-719-991-33	DIODE 1SS133T-77		R125	1-249-429-11	CARBON 10K 5%	1/4W
D102	8-719-991-33	DIODE 1SS133T-77		R126	1-249-437-11	CARBON 47K 5%	1/4W
D103	8-719-991-33	DIODE 1SS133T-77		R127	1-247-903-00	CARBON 1M 5%	1/4W
D104	8-719-991-33	DIODE 1SS133T-77		R301	1-249-419-11	CARBON 1.5K 5%	1/4W F
D105	8-719-991-33	DIODE 1SS133T-77		R302	1-249-438-11	CARBON 56K 5%	1/4W
D106	8-719-991-33	DIODE 1SS133T-77		R303	1-249-413-11	CARBON 470 5%	1/4W F
D107	8-719-991-33	DIODE 1SS133T-77		R304	1-249-438-11	CARBON 56K 5%	1/4W
D108	8-719-991-33	DIODE 1SS133T-77		R305	1-249-442-11	CARBON 510 5%	1/4W
D303	8-719-991-33	DIODE 1SS133T-77		△ R308	1-247-688-11	CARBON 10 5%	1/4W F
D304	8-719-991-33	DIODE 1SS133T-77		△ R309	1-247-688-11	CARBON 10 5%	1/4W F
D501	8-719-302-37	DIODE RBV-602		R310	1-249-417-11	CARBON 1K 5%	1/4W F
D503	8-719-200-82	DIODE 11ES2		R311	1-249-429-11	CARBON 10K 5%	1/4W
D504	8-719-200-82	DIODE 11ES2		R312	1-249-437-11	CARBON 47K 5%	1/4W
< FUSE >				R313	1-249-433-11	CARBON 22K 5%	1/4W
△ F1	1-532-501-31	FUSE (T0.8AL/250V)(AEP,G,UK,MY,SP)		R314	1-249-429-11	CARBON 10K 5%	1/4W
△ F1	1-533-296-11	FUSE, GLASS CYLINDRICAL (DIA.5) (2A/125V) (US,CND)		R315	1-249-431-11	CARBON 15K 5%	1/4W
< IC >				R316	1-249-415-11	CARBON 680 5%	1/4W F
IC101	8-759-634-50	IC M5218AL		R317	1-249-417-11	CARBON 1K 5%	1/4W F
IC102	8-759-634-50	IC M5218AL		△ R318	1-217-151-00	METAL 0.22 10%	2W
IC301	8-749-011-16	IC STK350-230		R319	1-249-441-11	CARBON 100K 5%	1/4W
IC302	8-759-634-50	IC M5218AL		R320	1-216-505-51	METAL OXIDE 1.2K 5%	5W F
IC303	8-759-111-68	IC uPC1237HA		R321	1-247-838-00	CARBON 2K 5%	1/4W
IC501	8-759-604-40	IC M5F78M15L		R322	1-249-429-11	CARBON 10K 5%	1/4W
IC502	8-759-604-46	IC M5F79M15L		R323	1-249-420-11	CARBON 1.8K 5%	1/4W F
< JACK >				R324	1-249-421-11	CARBON 2.2K 5%	1/4W F
J101	1-785-795-11	JACK, PIN 2P (LINE IN/OUT)		R325	1-249-425-11	CARBON 4.7K 5%	1/4W F
< RESISTOR >				R326	1-247-860-11	CARBON 16K 5%	1/4W
R101	1-260-107-11	CARBON 4.7K 5%	1/2W	R327	1-249-422-11	CARBON 2.7K 5%	1/4W F
R102	1-260-107-11	CARBON 4.7K 5%	1/2W	R328	1-249-441-11	CARBON 100K 5%	1/4W
R103	1-249-421-11	CARBON 2.2K 5%	1/4W F	R330	1-249-439-11	CARBON 68K 5%	1/4W
R104	1-249-421-11	CARBON 2.2K 5%	1/4W F	R331	1-249-433-11	CARBON 22K 5%	1/4W
R105	1-249-429-11	CARBON 10K 5%	1/4W	R334	1-249-436-11	CARBON 39K 5%	1/4W
R106	1-249-429-11	CARBON 10K 5%	1/4W	R335	1-249-432-11	CARBON 18K 5%	1/4W
R107	1-249-429-11	CARBON 10K 5%	1/4W	△ R501	1-249-381-11	CARBON 1 5%	1/4W F
R108	1-249-429-11	CARBON 10K 5%	1/4W	△ R502	1-249-381-11	CARBON 1 5%	1/4W F
R109	1-249-429-11	CARBON 10K 5%	1/4W	< RELAY >			
R110	1-249-429-11	CARBON 10K 5%	1/4W	RY301	1-515-920-11	RELAY (24V)	
R111	1-249-429-11	CARBON 10K 5%	1/4W	< TERMINAL >			
R112	1-249-429-11	CARBON 10K 5%	1/4W	TM101	1-537-737-11	TERMINAL BOARD (SPEAKER)	
R113	1-249-417-11	CARBON 1K 5%	1/4W F	*****			
R114	1-249-417-11	CARBON 1K 5%	1/4W F				
R115	1-247-887-00	CARBON 220K 5%	1/4W				

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POWER

POWER SWITCH

Ref. No.	Part No.	Description	Remarks			
	1-673-147-11	POWER BOARD	*****			
		< CAPACITOR >				
C401	1-104-664-11	ELECT	47uF	20%	25V	
C402	1-137-372-11	FILM	0.022uF	5%	50V	
		< CONNECTOR >				
* CN401	1-770-318-11	PIN, CONNECTOR 7P				
		< TRANSISTOR >				
Q401	8-729-119-76	TRANSISTOR	2SA1175-F			
Q402	8-729-141-30	TRANSISTOR	2SC3623ATP-LK			
Q403	8-749-010-25	IC MN2488-OPY-M				
Q404	8-749-010-26	IC MP1620-OPY-M				
		< RESISTOR >				
R401	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R402	1-249-437-11	CARBON	47K	5%	1/4W	
R403	1-249-414-11	CARBON	560	5%	1/4W	F
△ R404	1-249-408-11	CARBON	180	5%	1/4W	F
△ R405	1-249-408-11	CARBON	180	5%	1/4W	F
△ R406	1-217-151-00	METAL	0.22	10%	2W	
△ R407	1-217-151-00	METAL	0.22	10%	2W	
△ R408	1-249-393-11	CARBON	10	5%	1/4W	F
*****						
	1-674-330-11	POWER SWITCH BOARD	*****			
		< SWITCH >				
△ S1	1-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)	(ON/STANDBY)			
		< CONNECTOR >				
CN1	1-564-321-00	PIN, CONNECTOR 2P	*****			

Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	*****
14	1-824-346-11	WIRE,FLAT TYPE 5P	
△ 56	1-769-744-11	CORD, POWER (AEP,G,UK,MY,SP)	
△ 56	1-783-531-11	CORD, POWER (US,CND)	
△ 57	1-569-008-21	ADAPTOR, CONVERSION 2P (SP)	
△ 58	1-770-019-21	ADAPTOR, CONVERSION PLUG 3P (UK)	
112	1-694-516-11	TERMINAL, SPEAKER	
SP1	1-529-513-11	SPEAKER	
SP101	1-529-291-11	SPEAKER (2.5cm)	
SP102	1-529-290-11	SPEAKER (5cm)	
SP103	1-529-290-11	SPEAKER (5cm)	
△ T501	1-433-726-11	TRANSFORMER, POWER (US,CND)	
△ T501	1-433-728-12	TRANSFORMER, POWER (AEP,G,UK,MY,SP)	
△ T601	1-433-731-11	TRANSFORMER, POWER (US,CND)	
△ T601	1-433-732-11	TRANSFORMER, POWER (AEP,G,UK,MY,SP)	*****
		ACCESSORIES & PACKING MATERIALS	*****
	1-769-329-21	CORD, CONNECTION (PIN-PIN)	
	1-791-467-11	CORD, SPEAKER (10m)(VE705)	
	1-791-467-21	CORD, SPEAKER (2.5m)	
	3-867-384-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH)	
	3-867-384-21	MANUAL, INSTRUCTION (GERMAN,SPANISH,DUTCH,SWEDISH,ITALIAN, PORTUGUESE,POLISH,RUSSIAN,DANISH, FINNISH,CHINESE)(AEP,G,UK,MY,SP)	
	4-222-421-01	SCREW (5 × 18), HEXAGON SOCKET	
*	4-985-459-01	WRENCH, HEXAGON SHAFT	
	X-4951-969-1	FRAME ASSY, GRILLE	
	X-4952-023-1	STAND (V) ASSY	
	X-4952-024-1	STAND (H) ASSY (VE705)	*****
		HARDWARE LIST	*****
#1	7-685-664-79	SCREW +P 4 × 20 TYPE1	
#2	7-685-165-01	SCREW +PTP 4 × 25 TYPE1	
#3	7-685-645-79	SCREW +P 3 × 6 TYPE2 SLIT	
#4	7-682-147-01	SCREW +P 3 × 6	
#5	7-685-146-29	SCREW +P 3 × 8 TYPE2 SLIT	
#6	7-685-648-79	SCREW +P 3 × 12 TYPE2 NON-SLIT	
#7	7-685-647-79	SCREW +P 3 × 10 TYPE2 NON-SLIT	
#8	7-685-660-19	SCREW +BVTP 4 × 10 TYPE2 N-S	
#9	7-624-200-01	NUT, PUSH 1.5	

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# SA-VE702/VE705/ WMS7/SS-MS7

SONY®

## SERVICE MANUAL

US Model  
Canadian Model  
AEP Model  
UK Model  
E Model

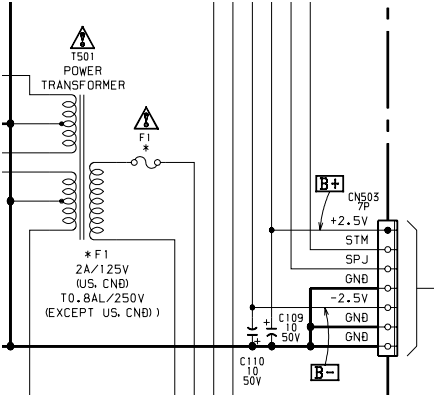
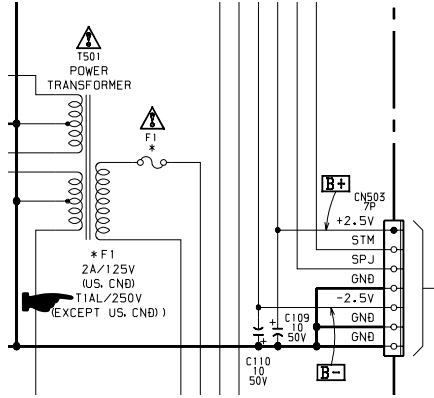








### SUPPLEMENT-1



File this supplement with the service manual.


Subject: Change of the Fuse

(ENG-00001)

 : Indicates changed portion.

Page	Before Change	After Change												
4	<p>Location: F – H, 8 – 11</p> 	<p>Location: F – H, 8 – 11</p> 												
13	<table><tr><th>Ref. No.</th><th>Part No.</th><th>Description</th></tr><tr><td> F1</td><td>1-532-501-31</td><td>FUSE (T0.8AL/250V) (EXCEPT US, Canadian)</td></tr></table>	Ref. No.	Part No.	Description	 F1	1-532-501-31	FUSE (T0.8AL/250V) (EXCEPT US, Canadian)	<table><tr><th>Ref. No.</th><th>Part No.</th><th>Description</th></tr><tr><td> F1</td><td>1-532-463-11</td><td>FUSE (T1AL/250V) (EXCEPT US, Canadian)</td></tr></table> <p> </p>	Ref. No.	Part No.	Description	 F1	1-532-463-11	FUSE (T1AL/250V) (EXCEPT US, Canadian)
Ref. No.	Part No.	Description												
 F1	1-532-501-31	FUSE (T0.8AL/250V) (EXCEPT US, Canadian)												
Ref. No.	Part No.	Description												
 F1	1-532-463-11	FUSE (T1AL/250V) (EXCEPT US, Canadian)												

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## REVISION HISTORY

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

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